

CLAIMS

1. A process for producing a three-dimensionally structured material, which comprises the steps of preparing a liquid composition
5 comprising a block polymer and a liquid medium, and imparting a stimulus to the liquid composition to modify the block polymer, thereby forming the three-dimensionally structured material.

2. The production process according to claim 1,
10 which further comprises a step of solidifying the liquid composition after the modification of the block copolymer.

3. The production process according to claim 1,
15 wherein the block polymer is amphiphilic and forms micelles.

4. The production process according to claim 1,
wherein the stimulus to the liquid composition is selected from temperature change, application of an electric field, exposure to electromagnetic wave, pH
20 change, addition of a chemical substance, and concentration change.

5. The production process according to claim 1,
which further comprises a step of ejecting the liquid composition to form the three-dimensionally
25 structured material.

6. The production process according to claim 1,
wherein a functional substance is included in the

block polymer.

7. The production process according to claim 6,
wherein the functional substance is selected from an
agricultural chemical, a medicament and a coloring
5 material.

8. The production process according to claim 7,
wherein the coloring material includes a pigment.

9. The production process according to claim 1,
wherein the block polymer has a repeating structure
10 of a monomer unit composed of an alkenyl ether.

10. An apparatus for producing a three-
dimensionally structured material, which comprises a
means for imparting a stimulus to a liquid
composition comprising a block polymer and a liquid
15 medium to modify the block polymer, thereby forming
the three-dimensionally structured material.

11. A liquid composition suitable for use in
producing a three-dimensionally structured material,
which comprises a block polymer modifiable by
20 stimulus and a liquid medium.

12. The liquid composition according to claim
11, wherein the block polymer is amphiphilic and
forms micelles.

13. The liquid composition according to claim
25 11, wherein the block polymer has a repeating
structure of a monomer unit composed of an alkenyl
ether.

14. A three-dimensionally structured material
formed by a block polymer modifiable by stimulus.